

FIG. 1

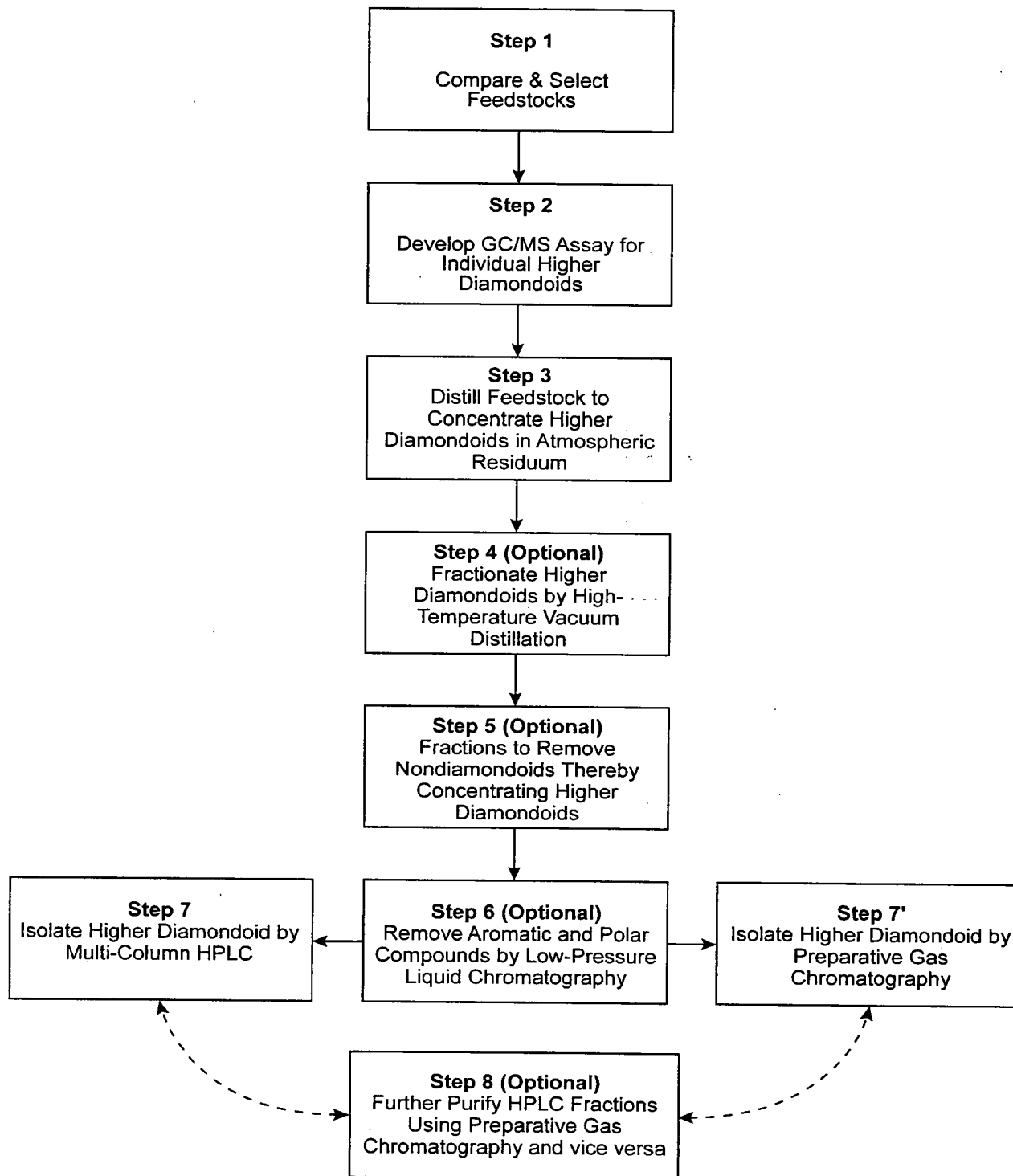


FIG. 2

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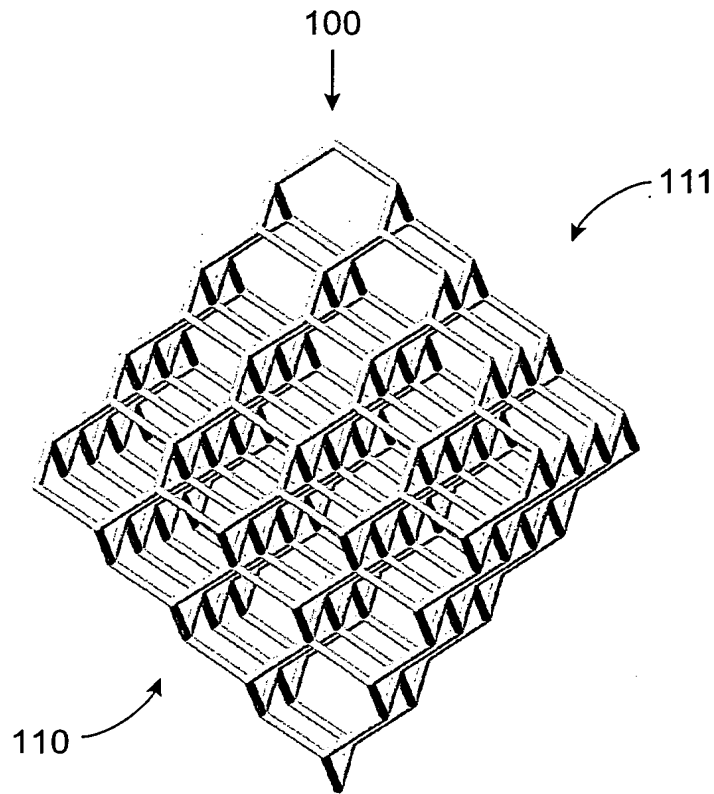


FIG. 3A

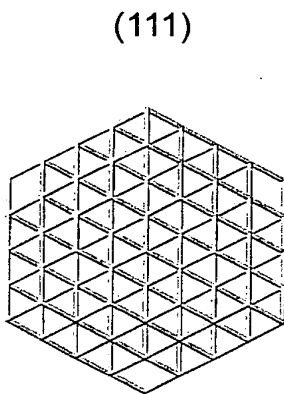


FIG. 3B

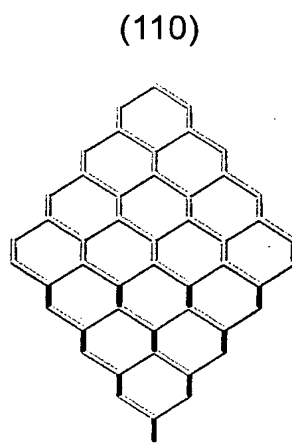


FIG. 3C

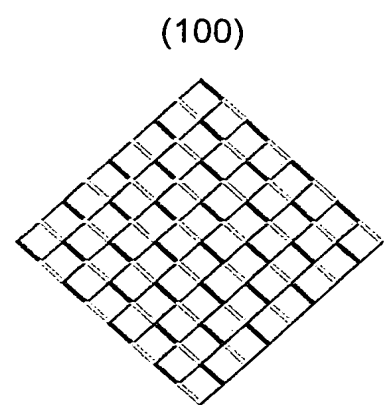


FIG. 3D

+

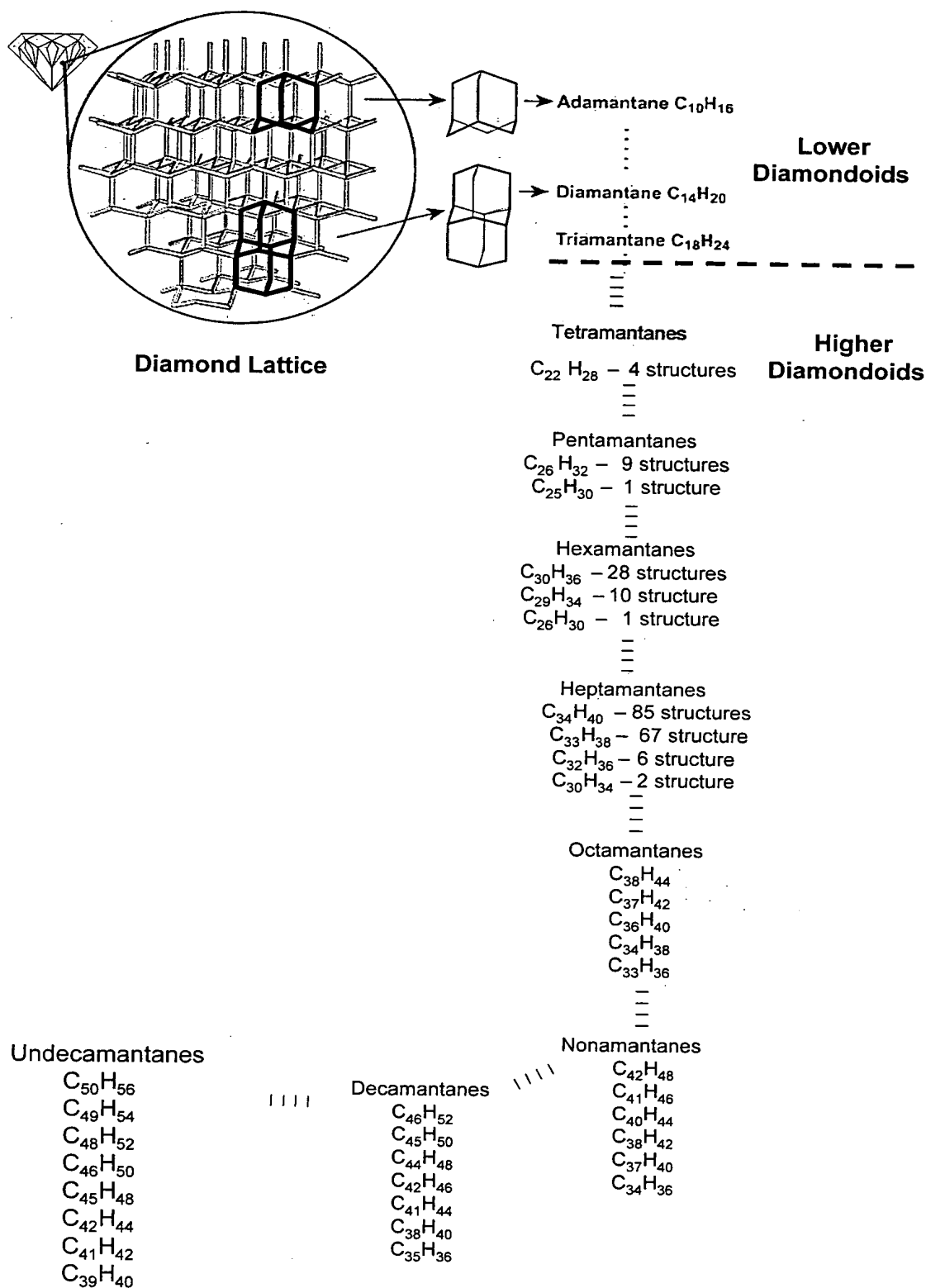


FIG. 4

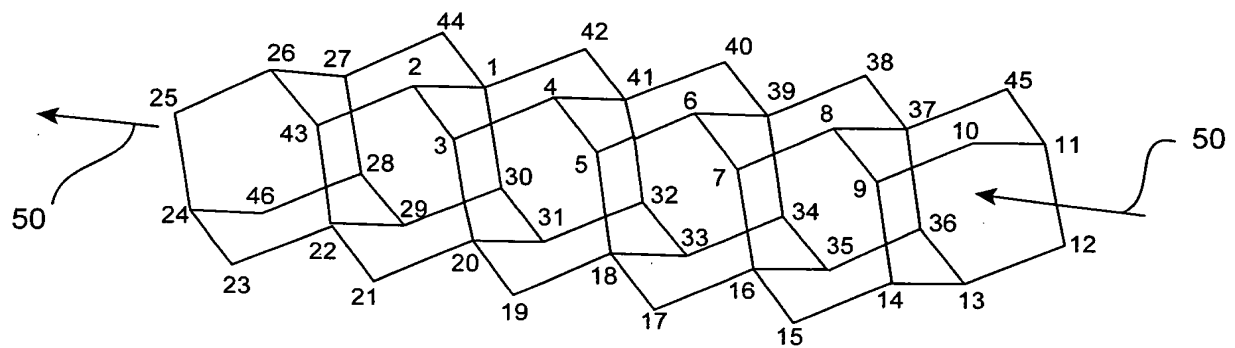


FIG. 5A

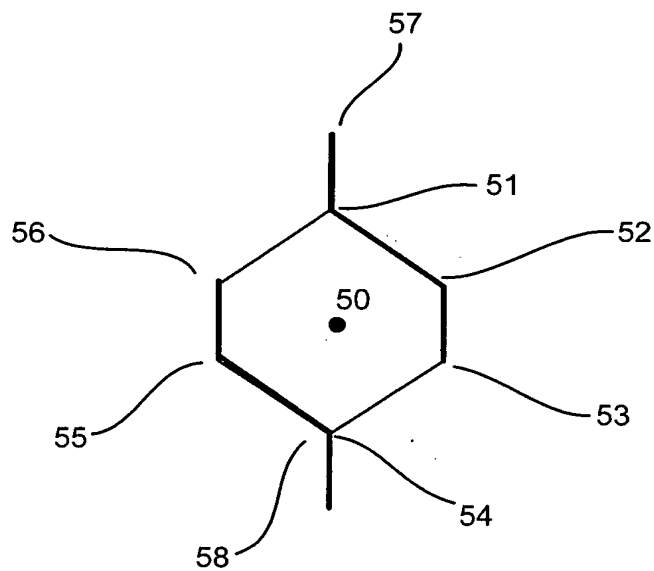


FIG. 5B

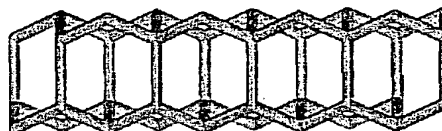
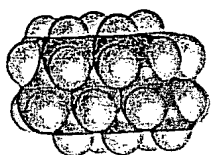
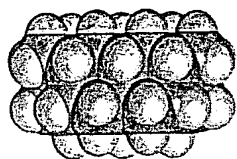
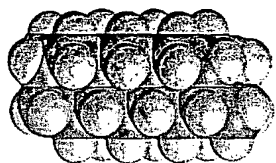
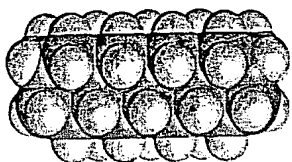
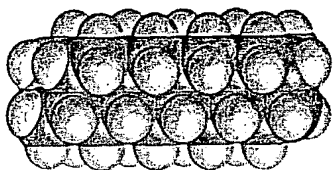


FIG. 5C

FIG. 5D

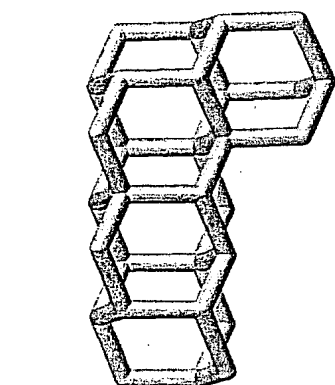
FIG. 5E

FIG. 5F

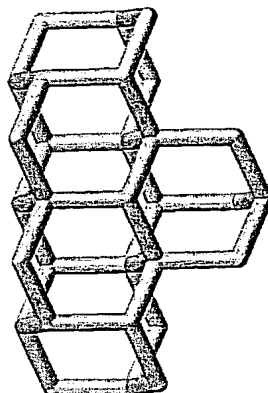
FIG. 5G

Position	Number of adamantane	Tetramantane n=4	Petramantane n=5	Hexamantane n=6	Heptamantane n=7
57	Number Type	n-2=2 all secondary	m-2=3 all secondary	n-3=3 all secondary	m-3=4 all secondary
58	Number Type	n-2=2 all secondary	m-3=2 all secondary	n-3=3 all secondary	m-4=3 all secondary
51	Number Type	n-1=3 2 tertiary carbons at the ends 1 quaternary carbon in the middle	m-1=4 2 tertiary carbons at the ends 2 quaternary carbons in the middle	n-2=4 2 tertiary carbons at the ends 2 quaternary carbons in the middle	m-2=5 2 tertiary carbons at the ends 2 quaternary carbons in the middle
54	Number Type	n-1=3 2 tertiary carbons at the ends 1 quaternary carbon in the middle	m-2=3 2 tertiary carbons at the ends 1 quaternary carbon in the middle	n-2=4 2 tertiary carbons at the ends 2 quaternary carbons in the middle	m-2=5 2 tertiary carbons at the ends 2 quaternary carbons in the middle
52,56	Number Type	n-1=3 1 secondary, 1 tertiary carbon at the ends 1 tertiary carbon in the middle	m-1=4 2 secondary carbons at the ends 2 tertiary carbons in the middle	n-2=4 1 secondary, 1 tertiary carbon at the ends 2 tertiary carbons in the middle	m-2=5 2 secondary carbons at the ends 3 tertiary carbons in the middle
53,55	Number Type	n-1=3 1 secondary, 1 tertiary carbon at the ends 1 tertiary carbon in the middle	m-2=3 2 tertiary carbons at the ends 1 tertiary carbon in the middle	n-2=4 1 secondary, 1 tertiary carbon at the ends 2 tertiary carbons in the middle	m-3=4 2 tertiary carbons at the ends 2 tertiary carbons in the middle

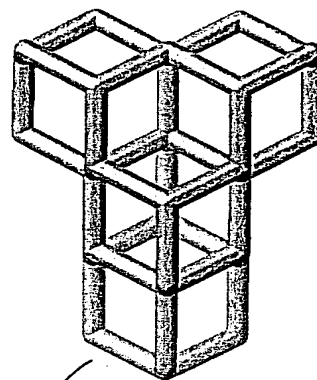
FIG. 5H



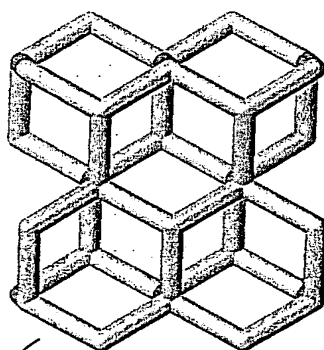
601



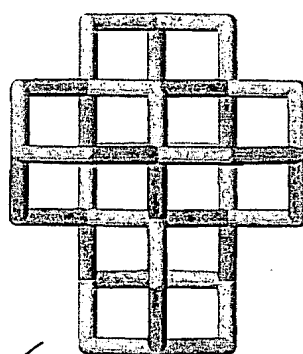
602



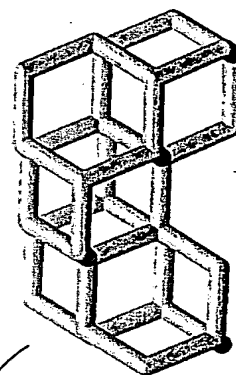
603



604

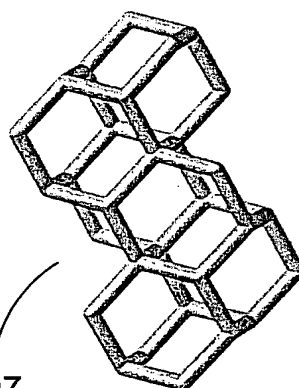


605



606

FIG. 6A



607

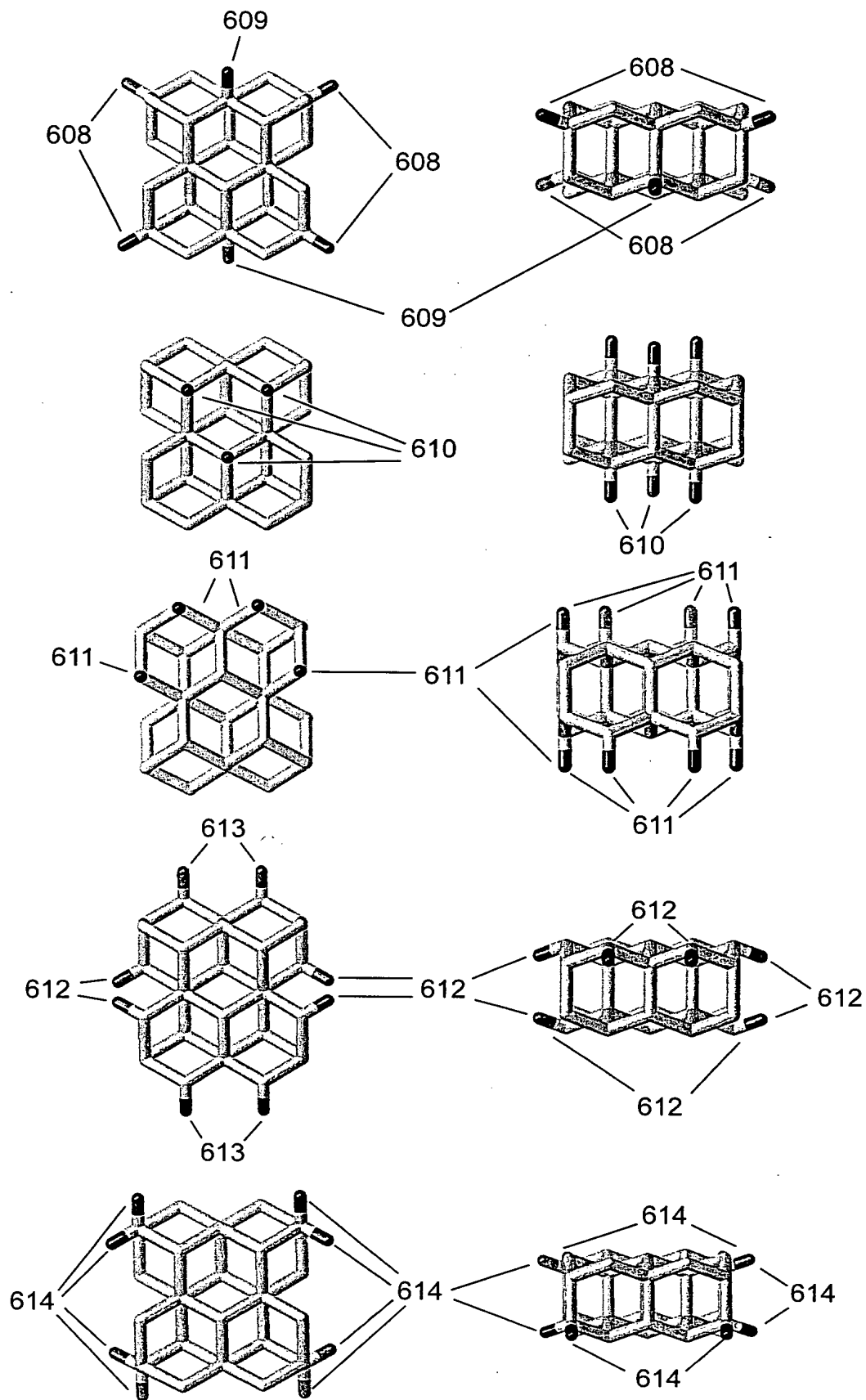


FIG. 6B

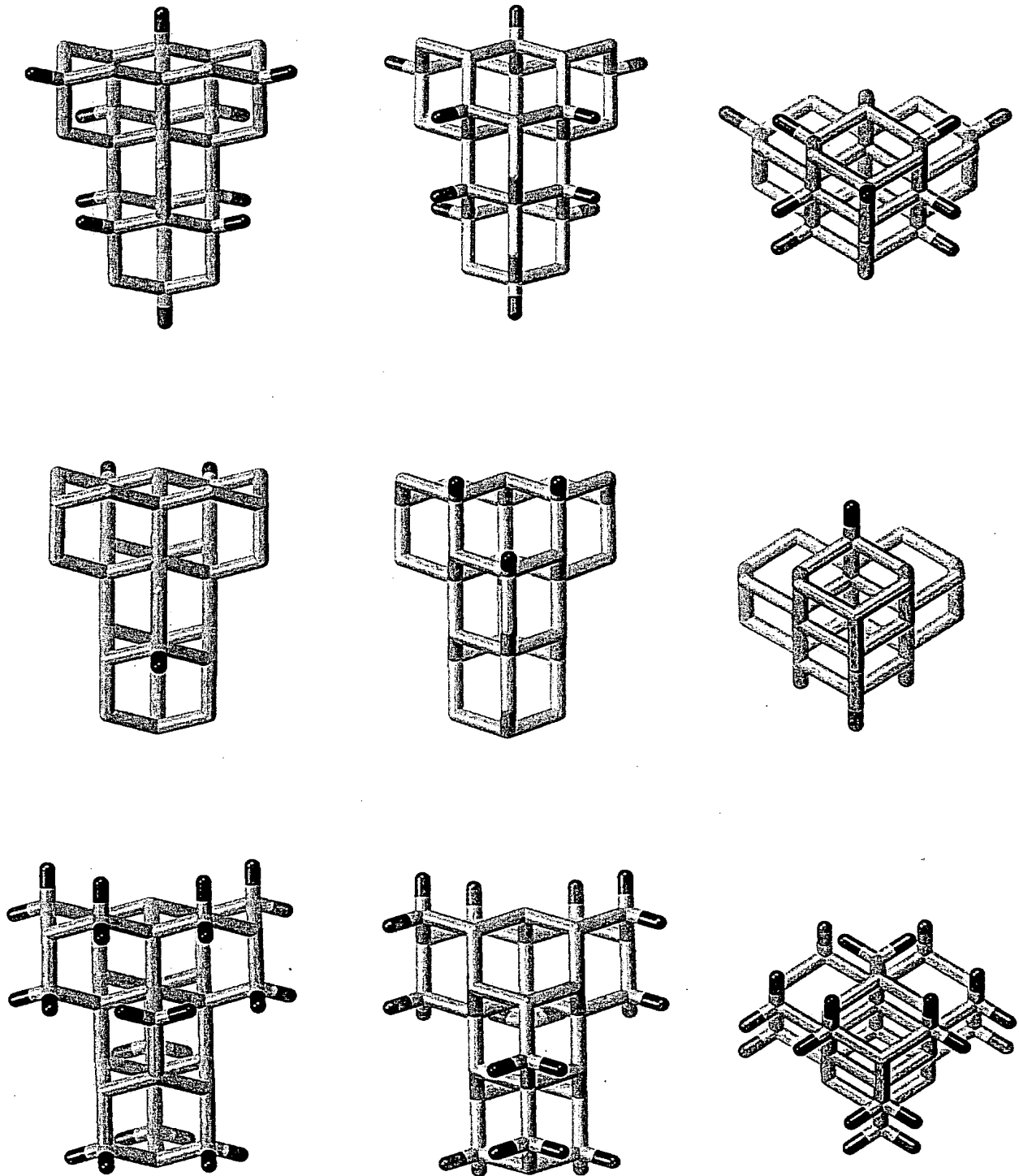


FIG. 6C

+

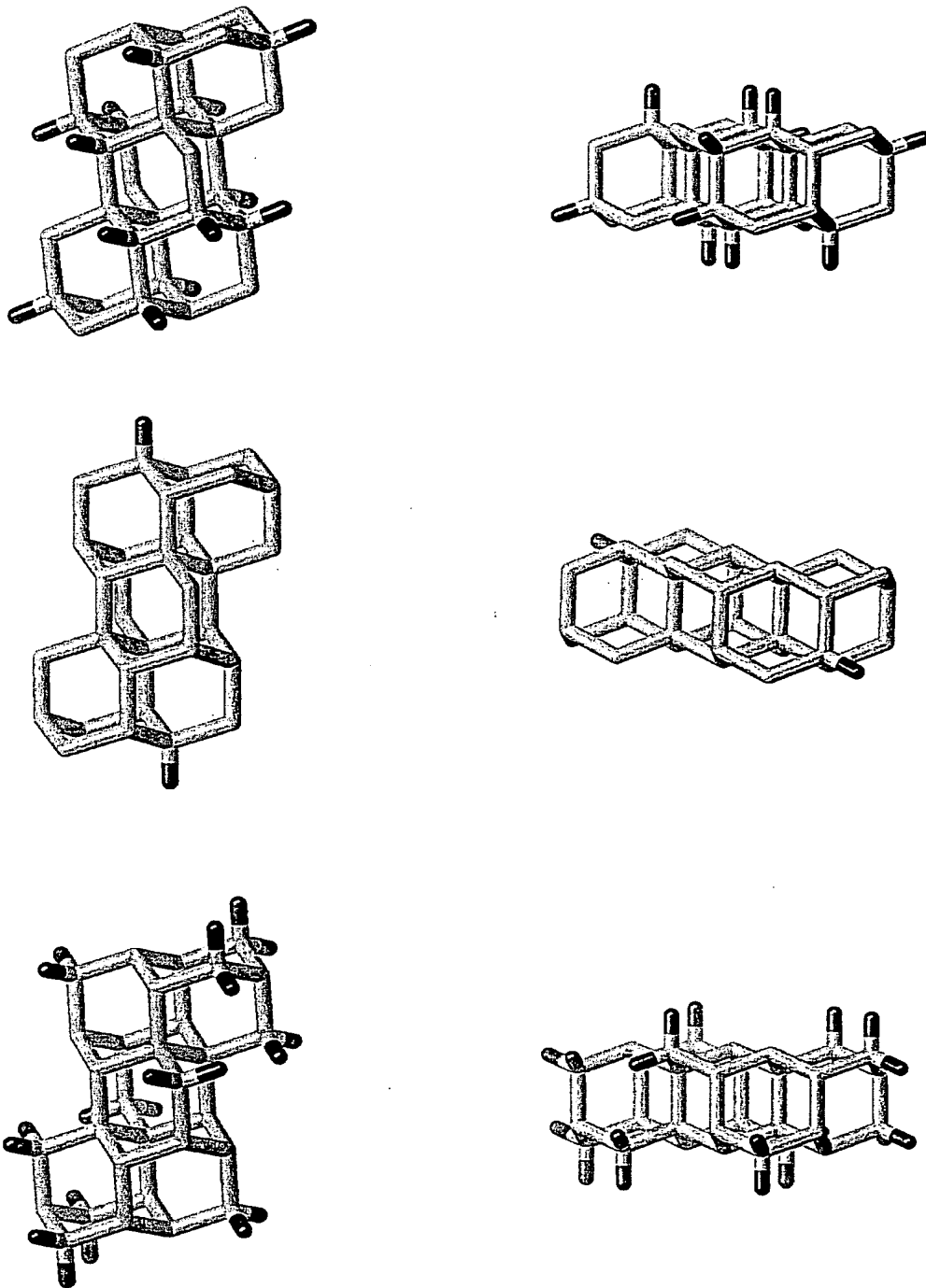


FIG. 6D

+

+

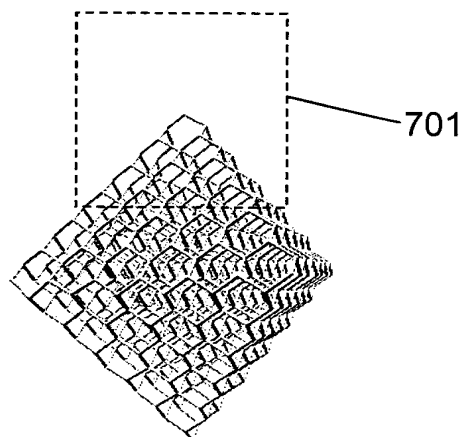


FIG. 7A

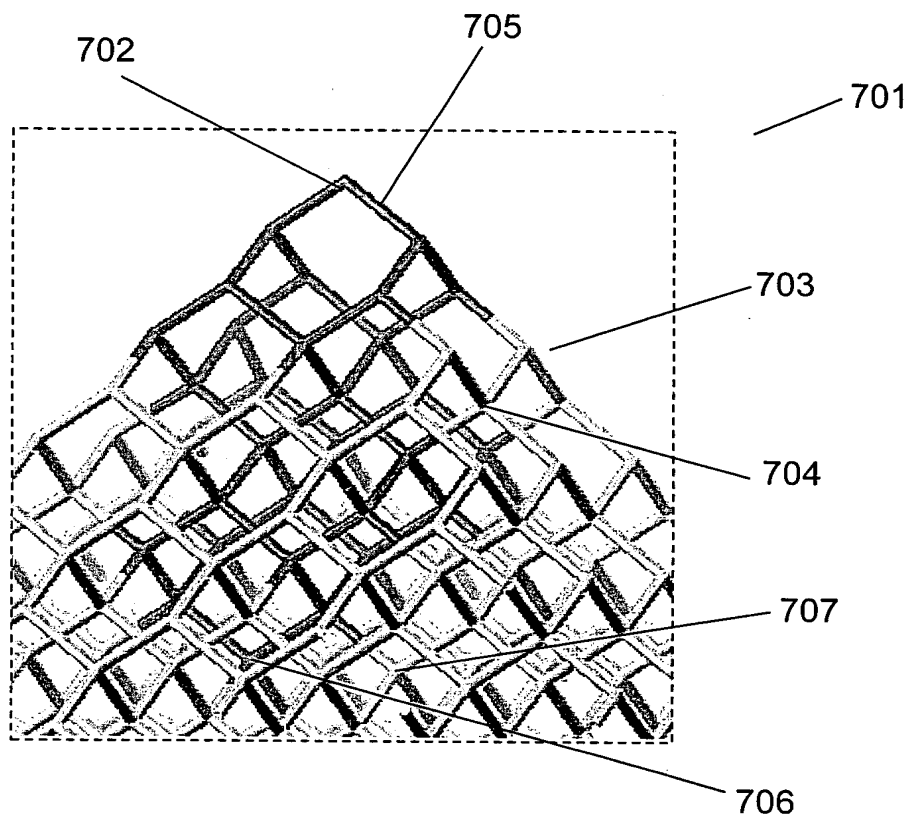


FIG. 7B

+

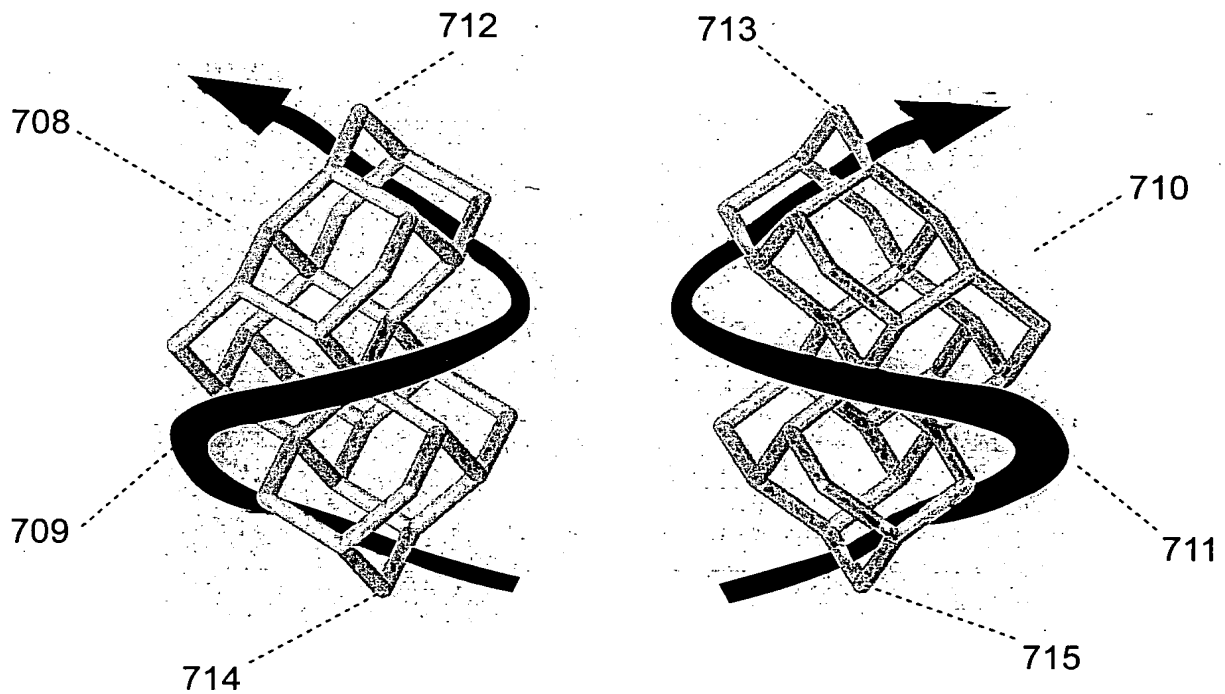


FIG. 7C

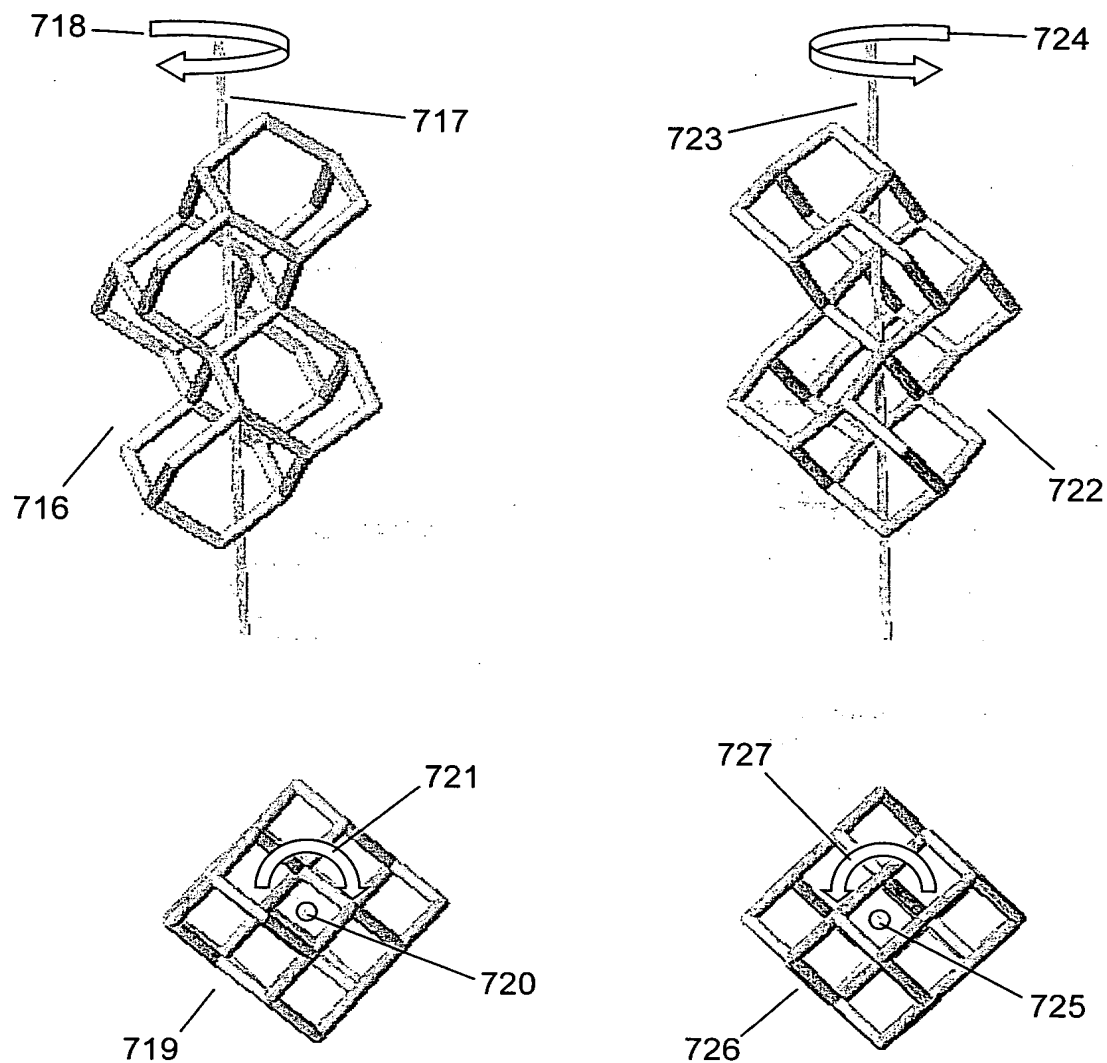


FIG. 7D

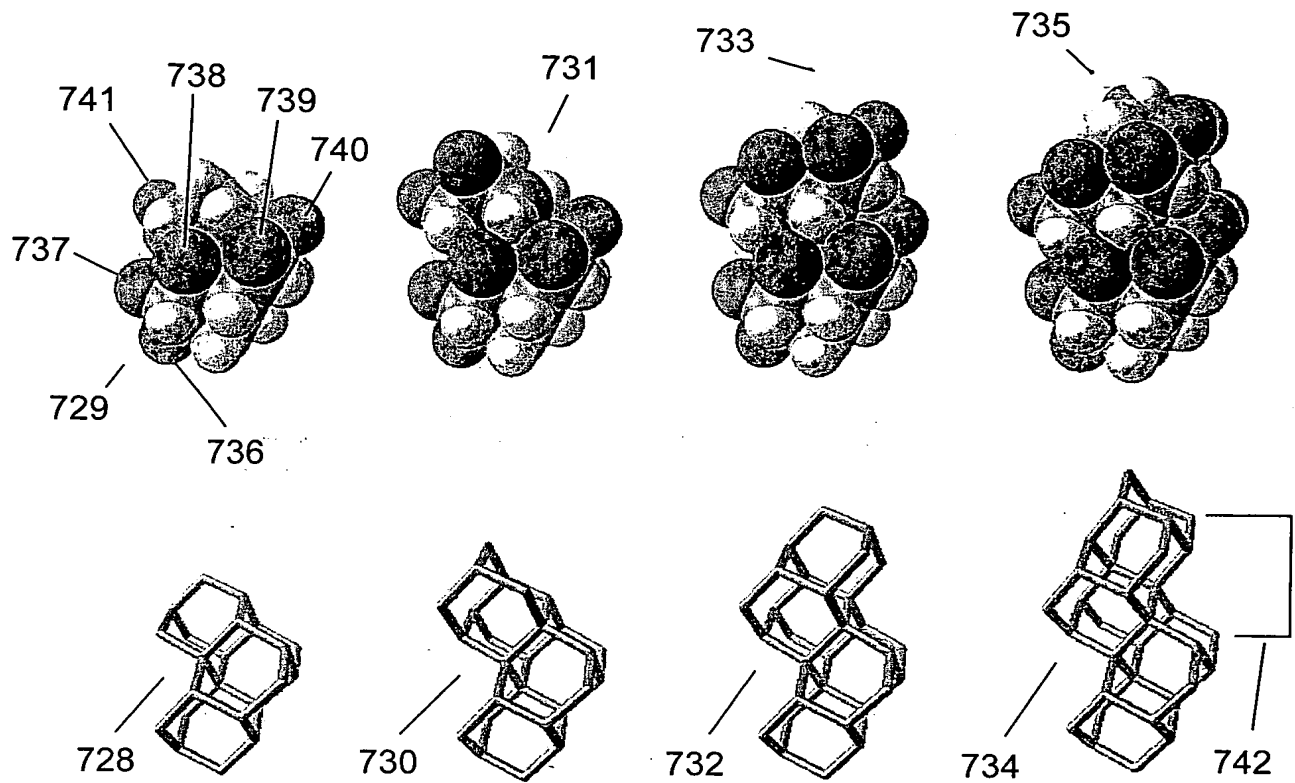


FIG. 7E

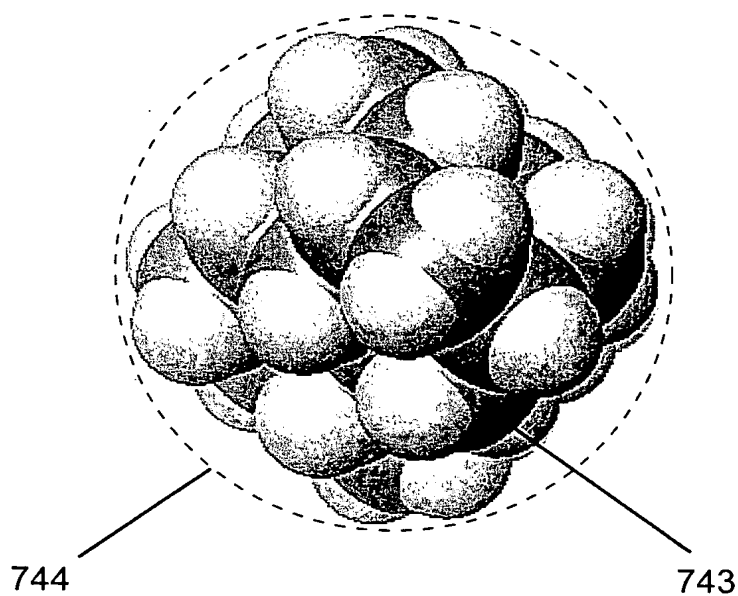
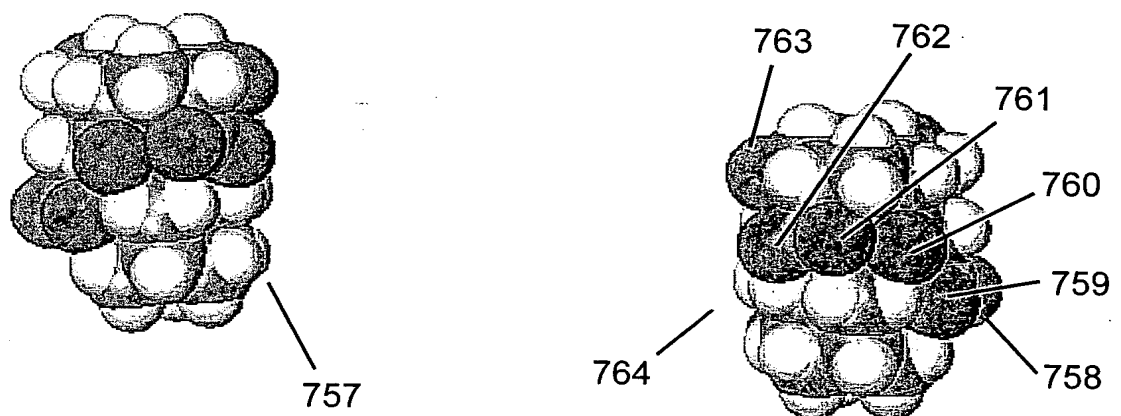
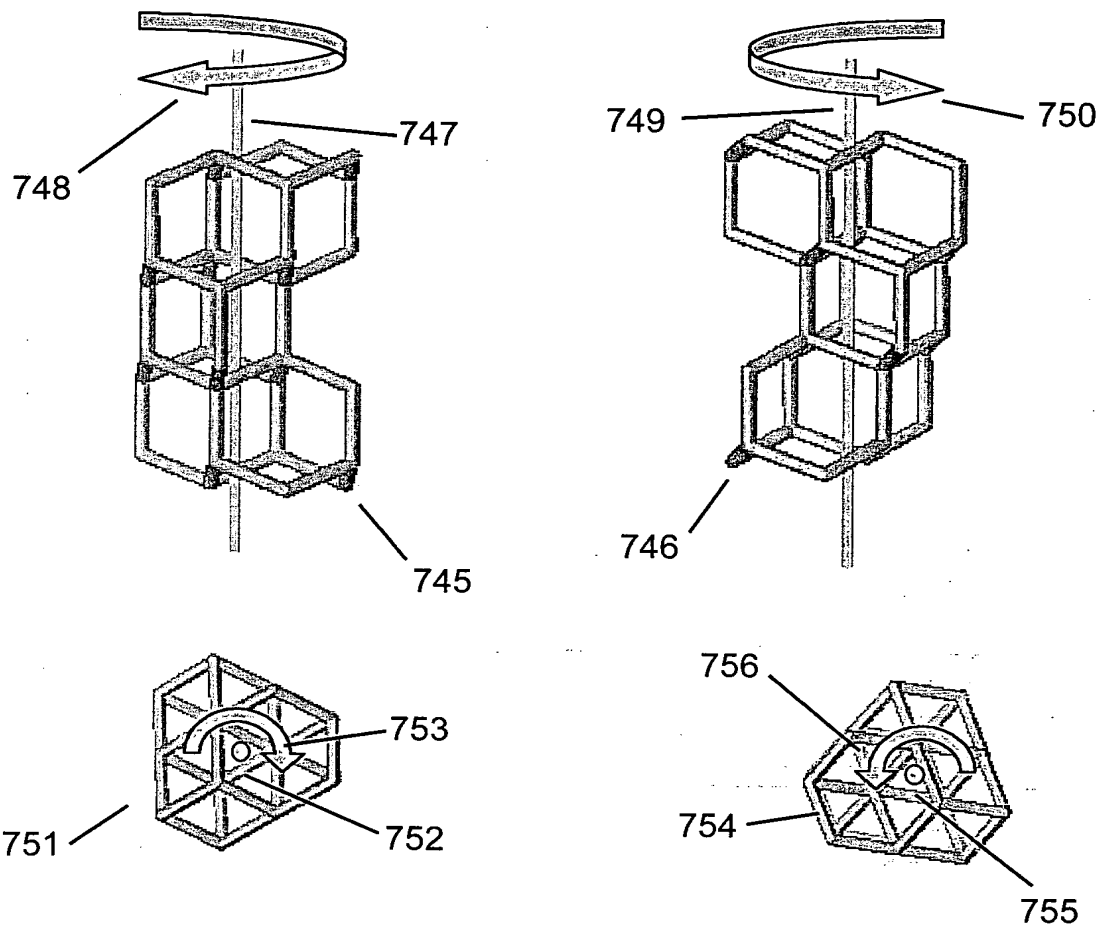


FIG. 7F



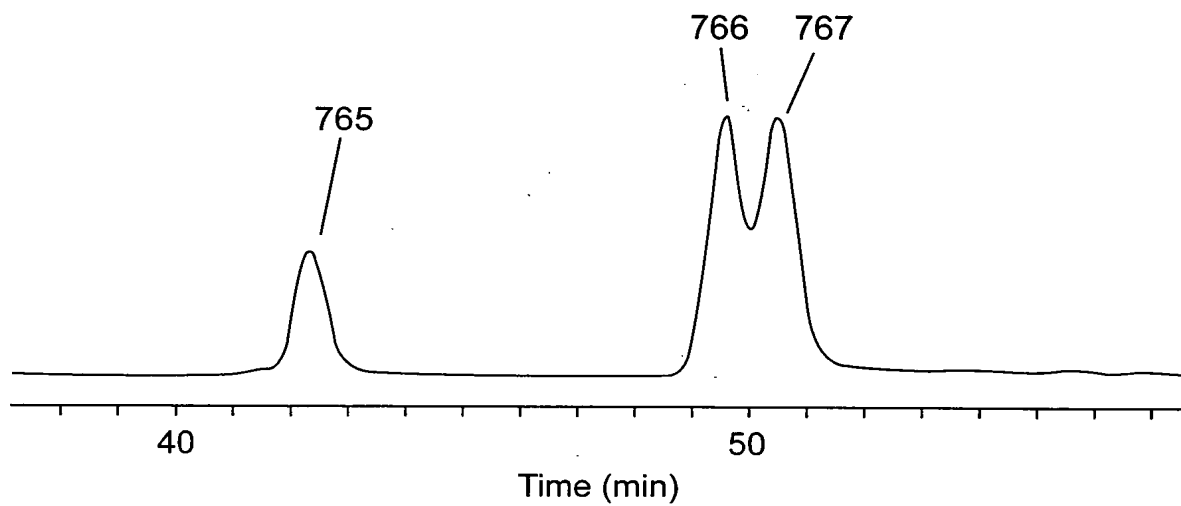


FIG. 7I

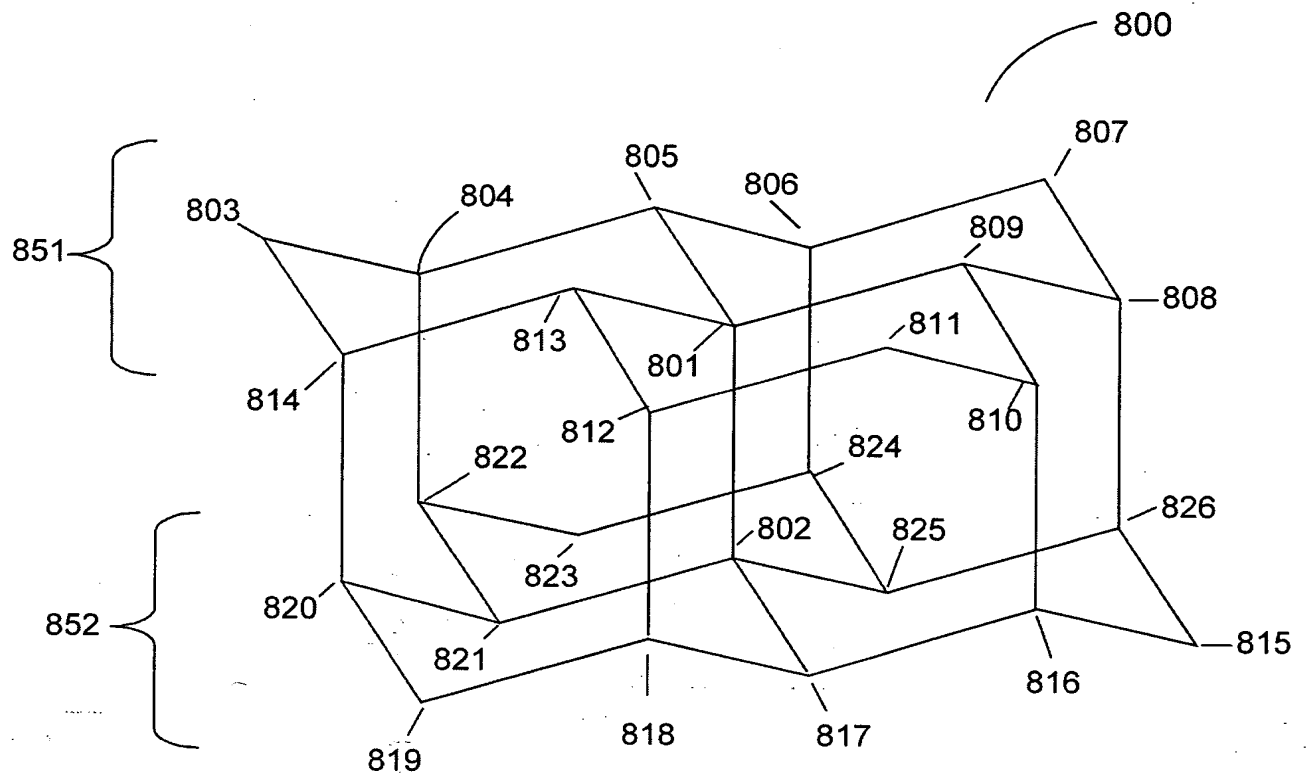


FIG. 8A

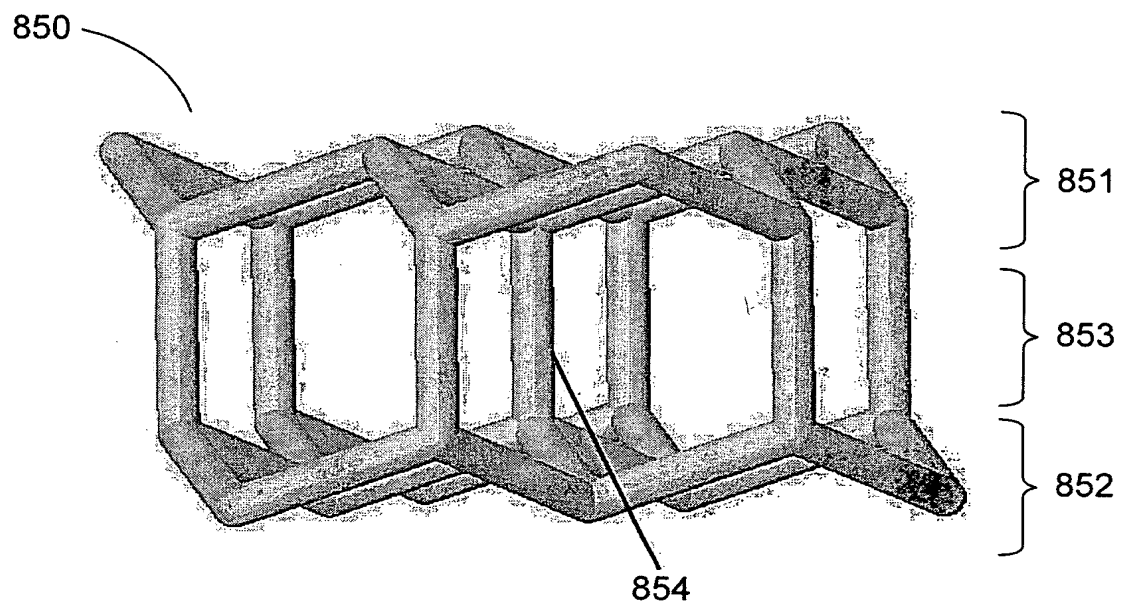


FIG. 8B

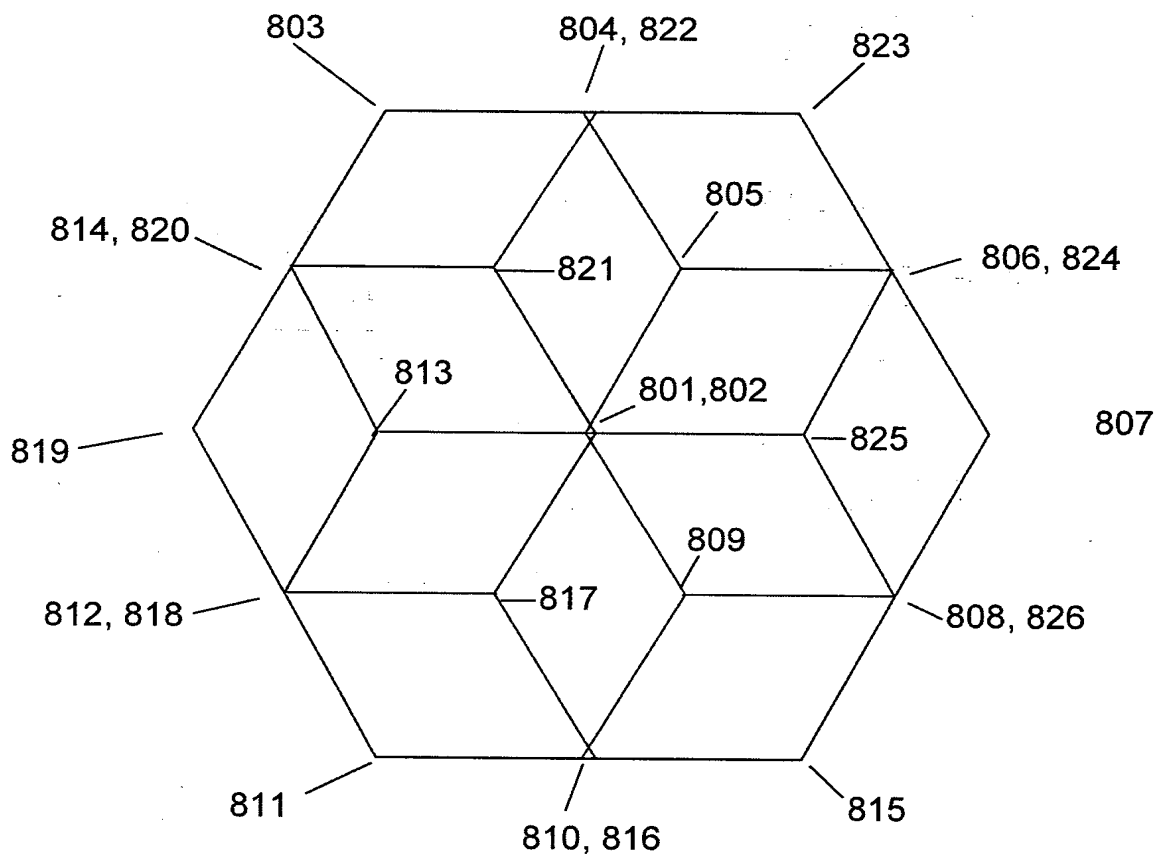


FIG. 8C

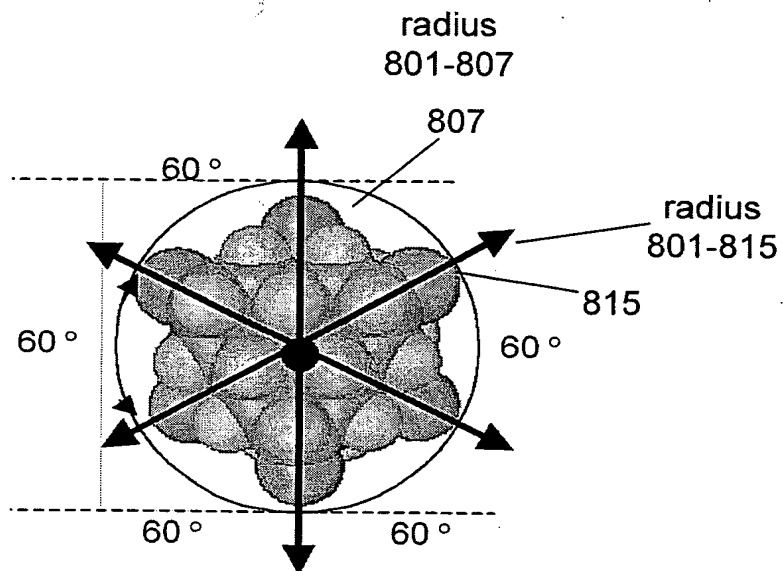
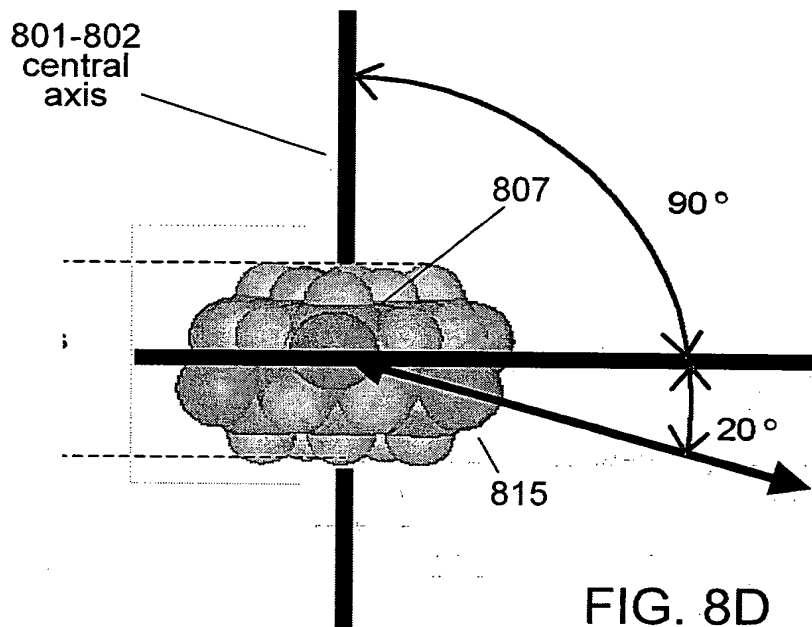


FIG. 8E

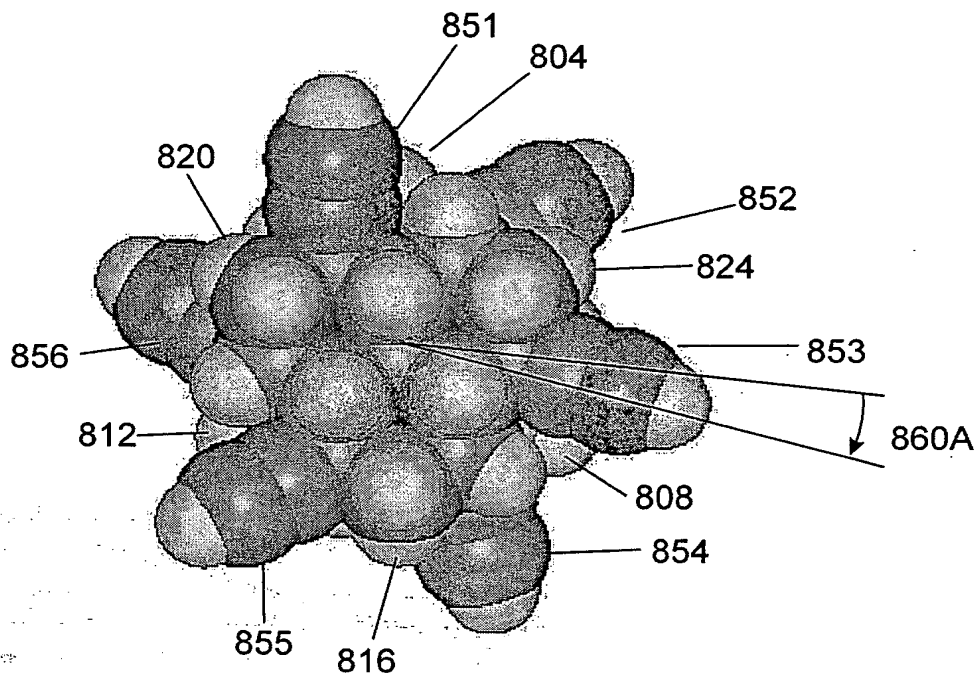


FIG. 8F

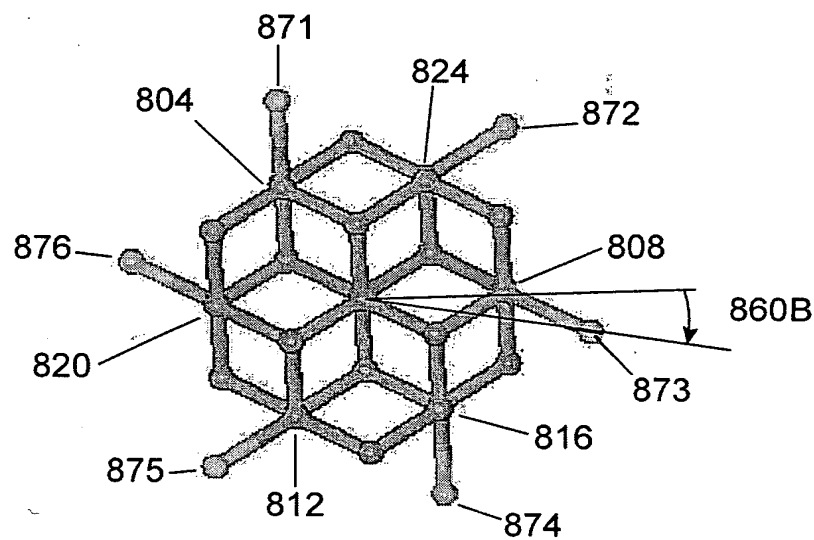


FIG. 8G

REPLACEMENT SHEET

APPLN. FILING DATE: JULY 16, 2003

TITLE: DIAMONDROID-BASED COMPONENTS IN
NANOSCALE CONSTRUCTION

INVENTOR(S): ROBERT M. CARLSON ET AL.

APPLN. NO.: 10/621,718

SHEET 23 OF 36

+

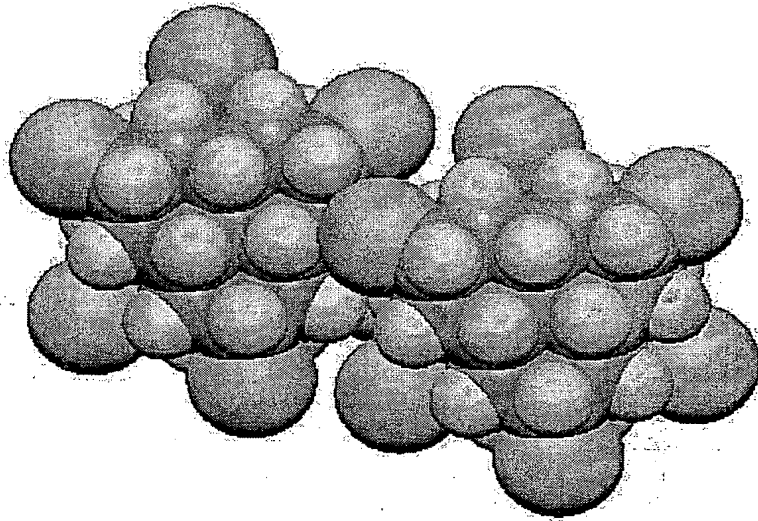


FIG. 8H

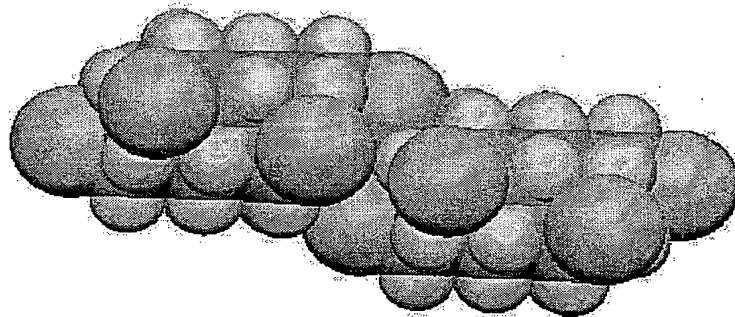


FIG. 8I

+

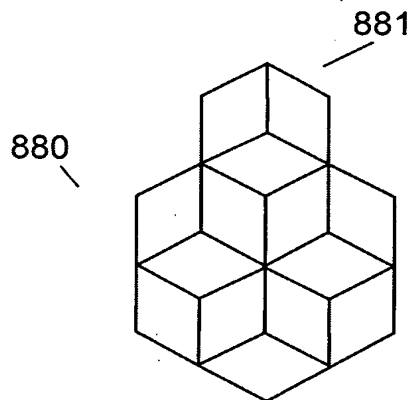


FIG. 8J

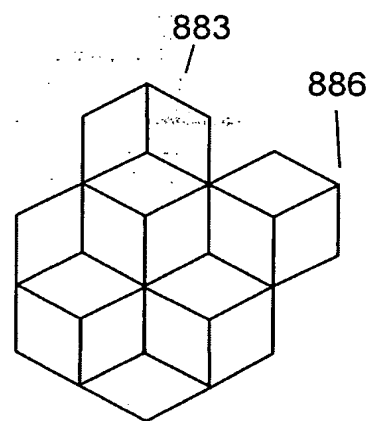
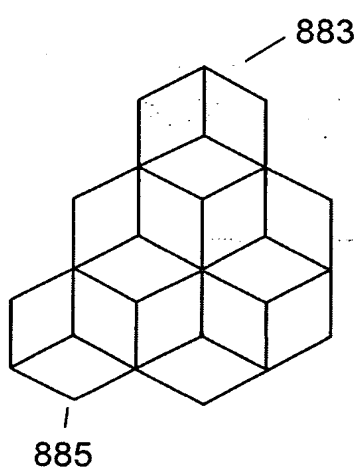
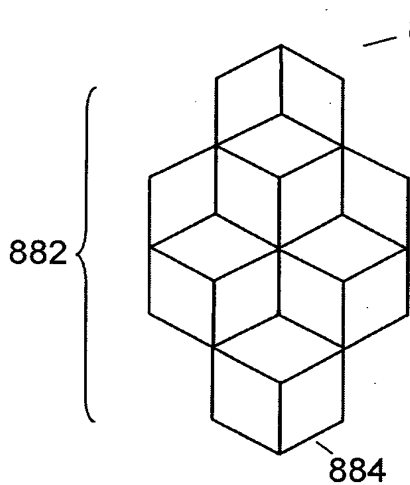


FIG. 8K

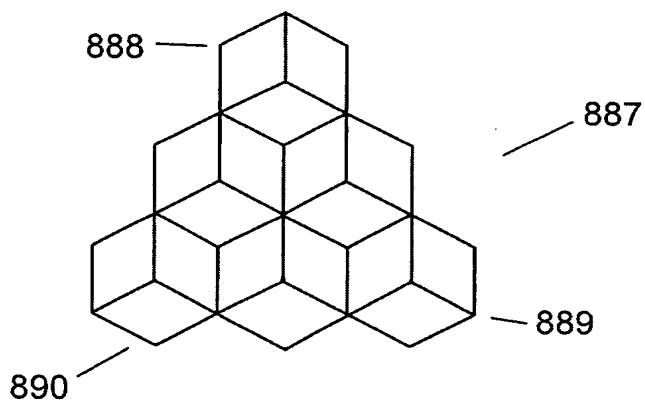


FIG. 8L

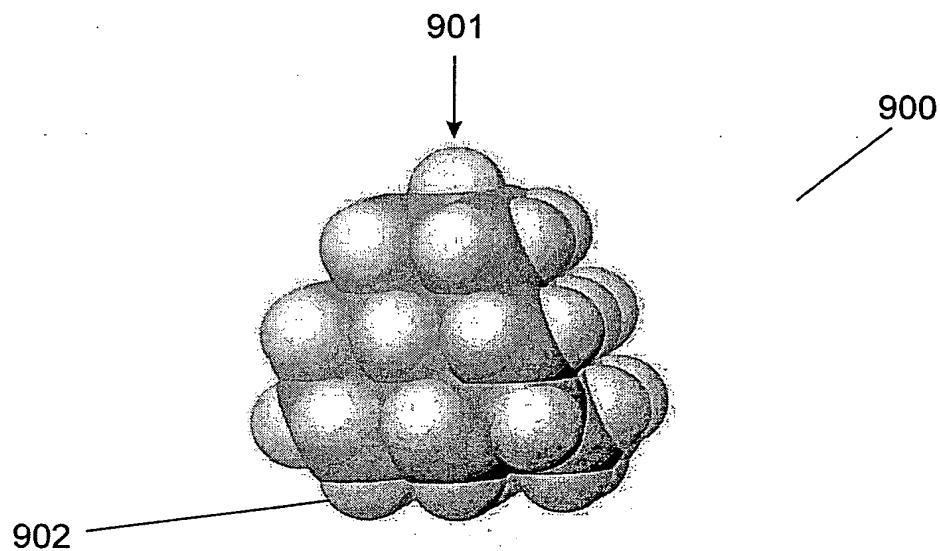


FIG. 9A

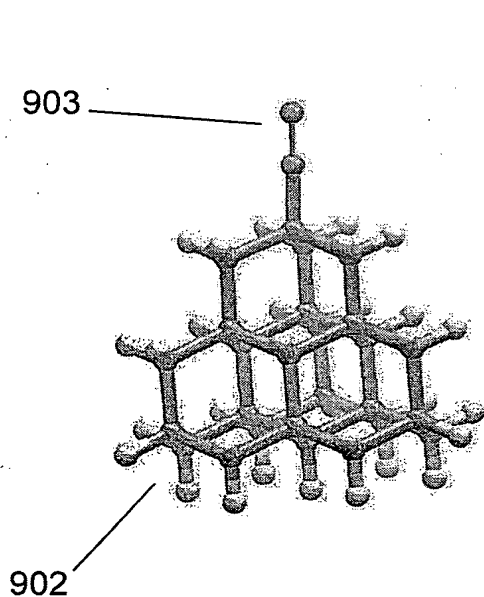


FIG. 9B

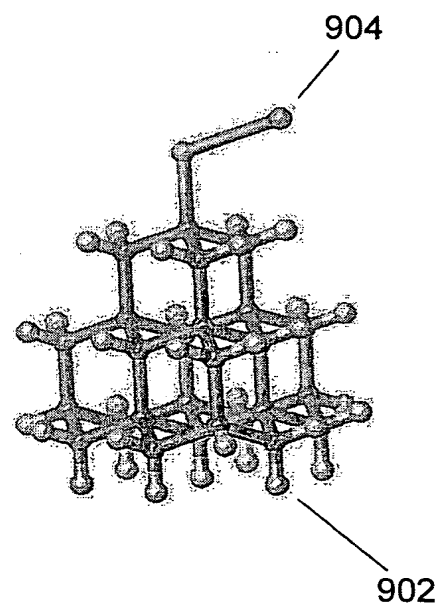


FIG. 9C

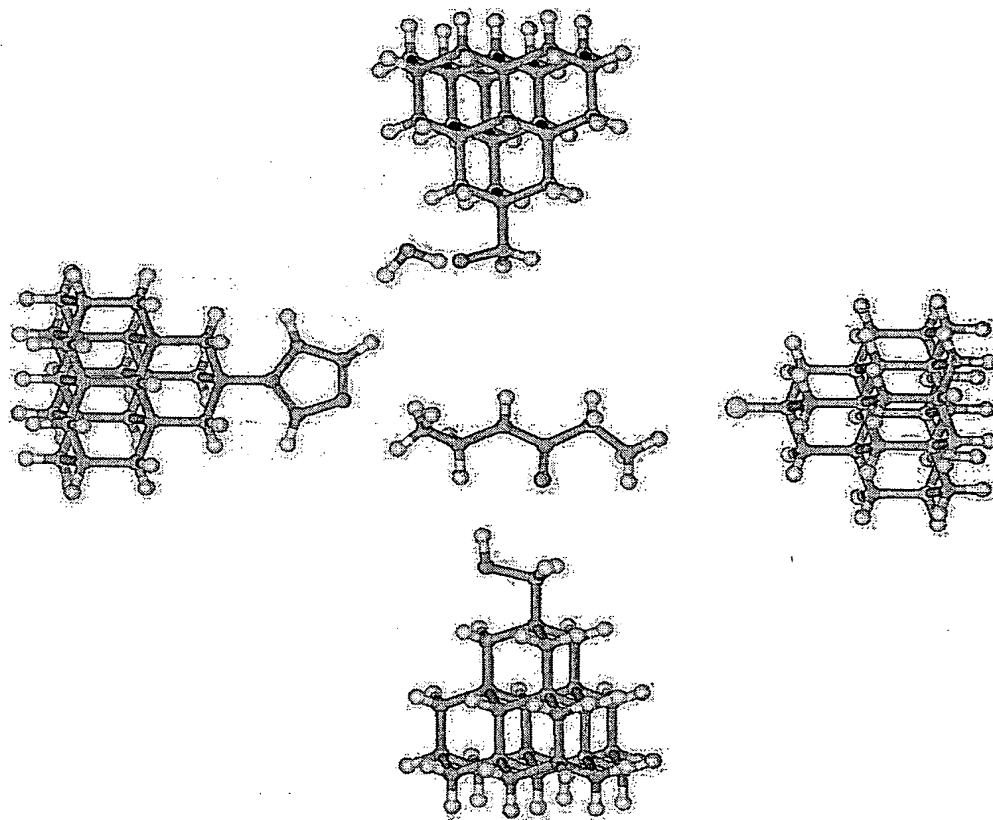


FIG. 9D

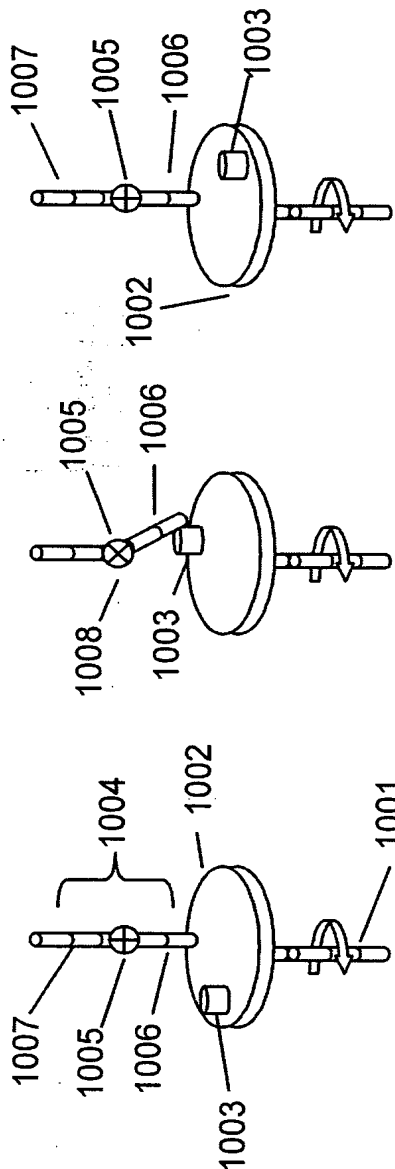


Fig. 10A

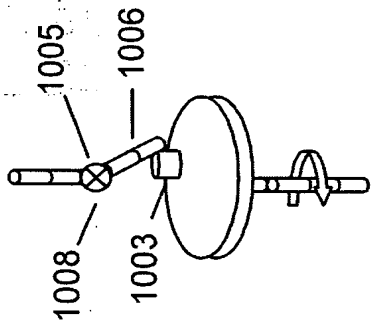


Fig. 10B

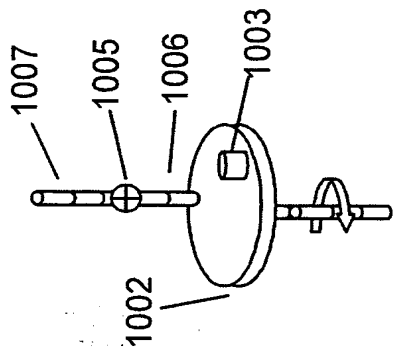


Fig. 10C

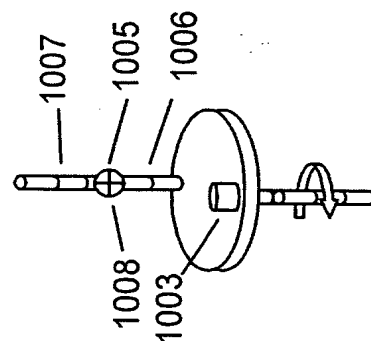


Fig. 10D

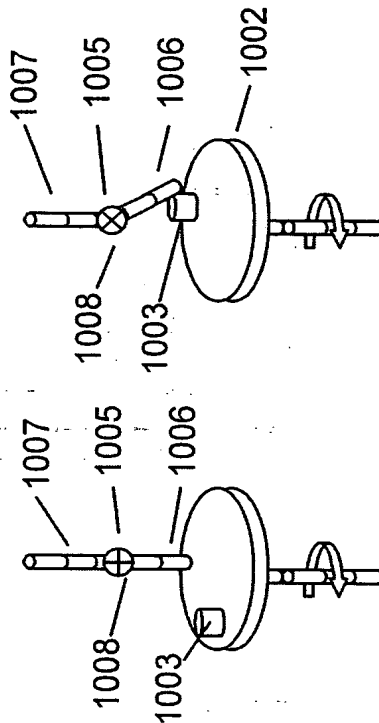


Fig. 10E

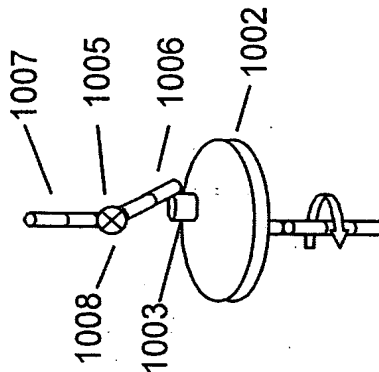
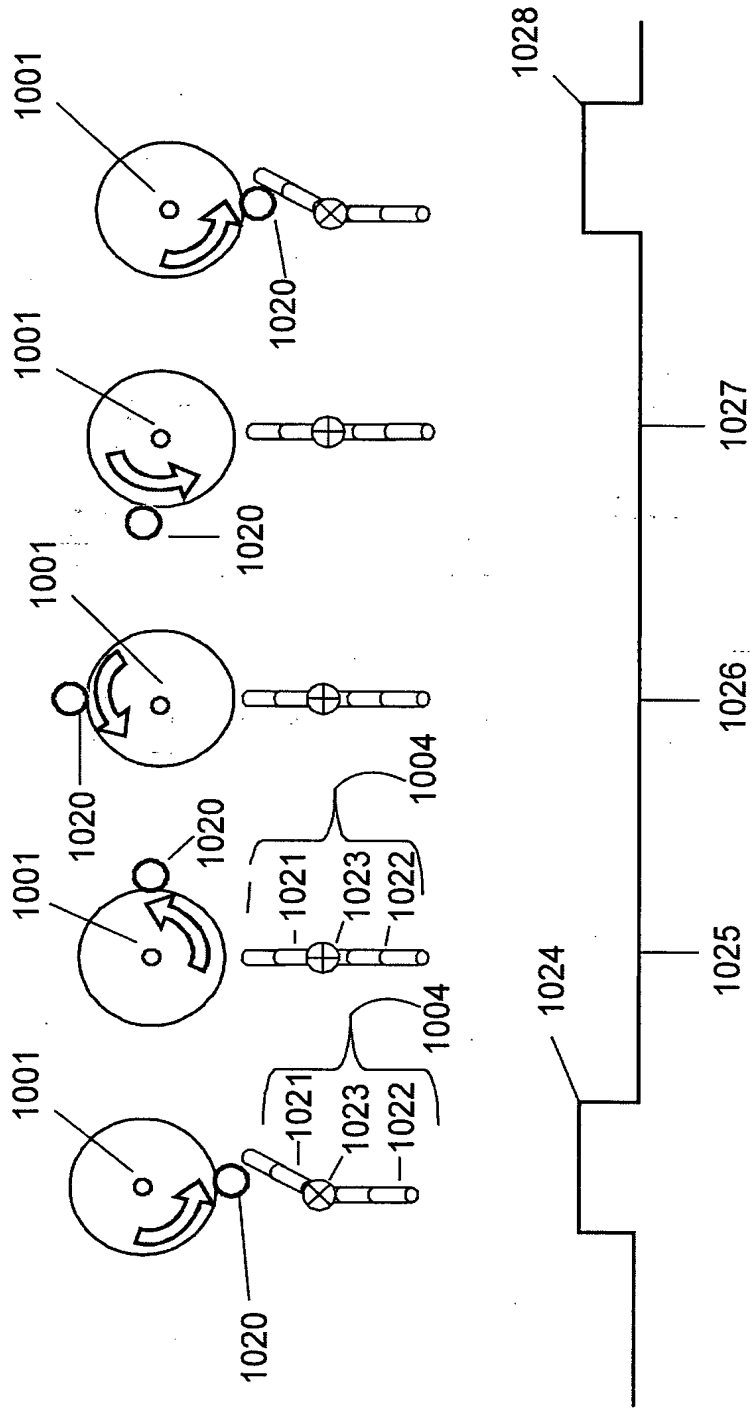
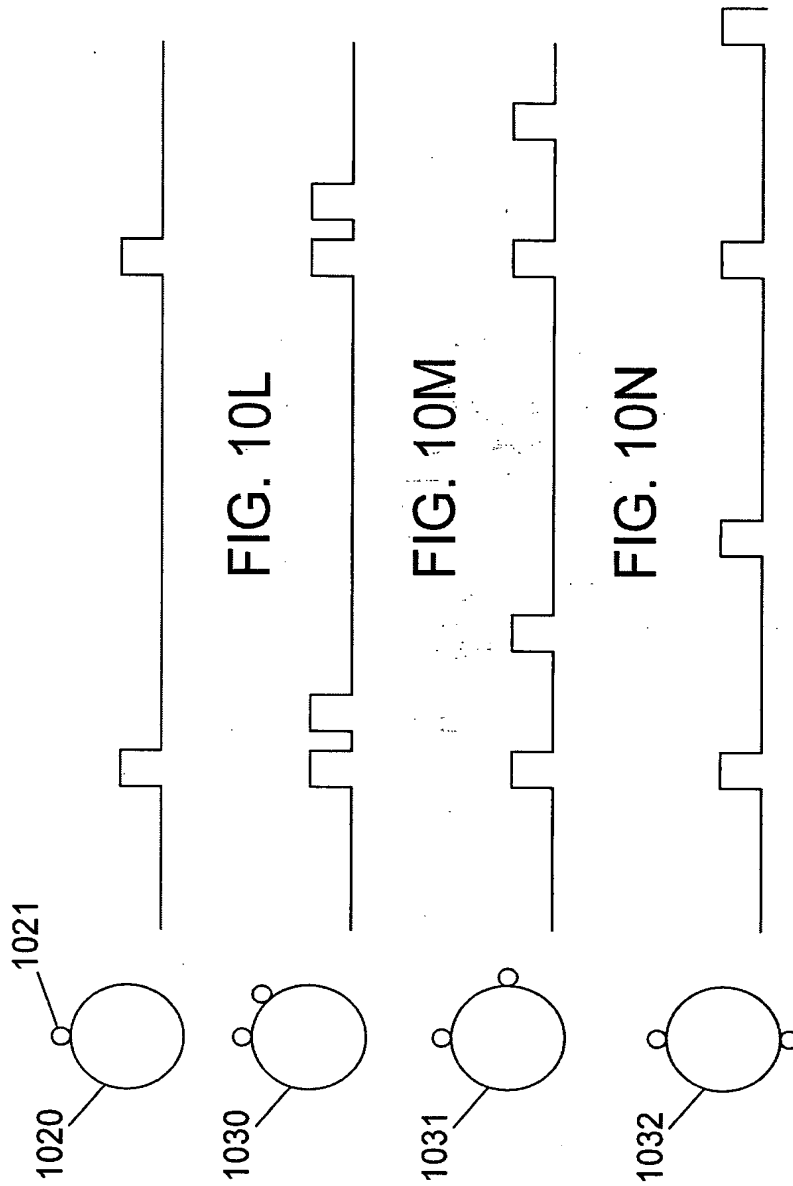


Fig. 10F

FIG. 10G FIG. 10H FIG. 10I FIG. 10J FIG. 10K





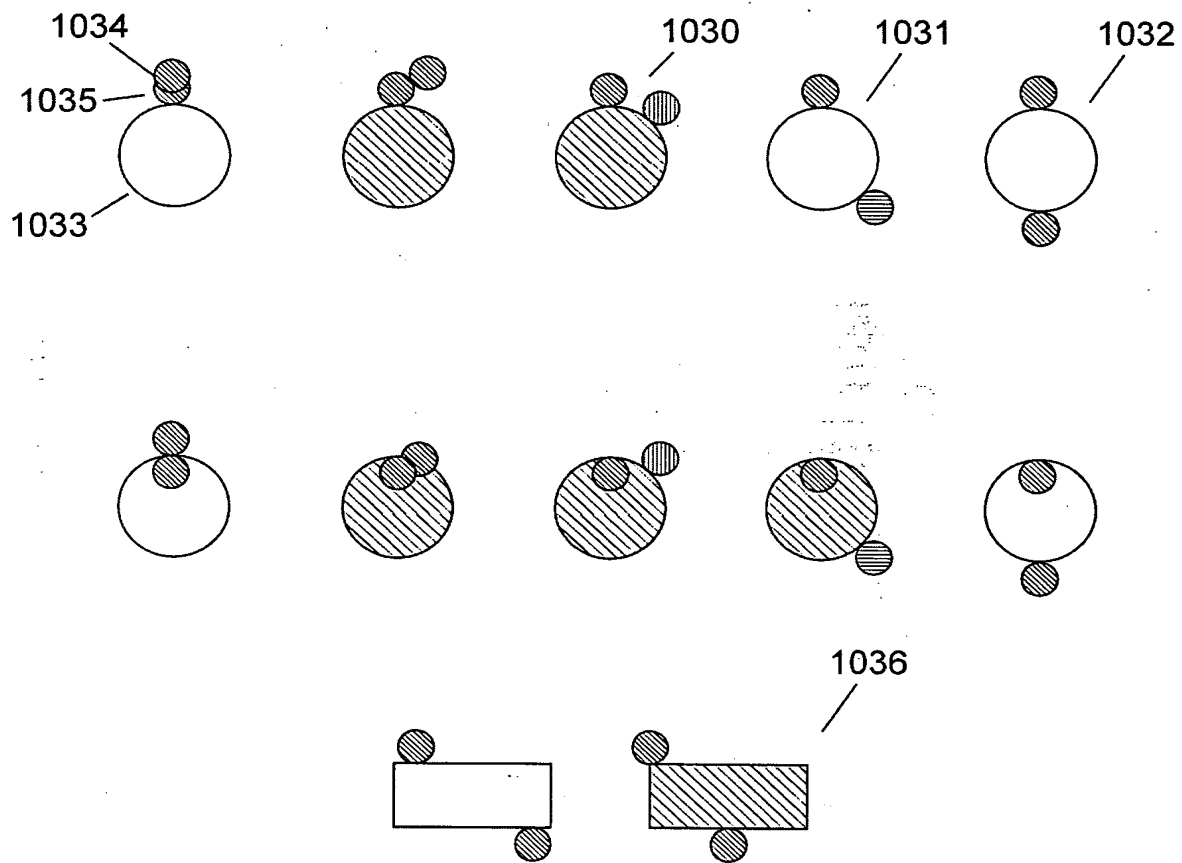


FIG. 10P

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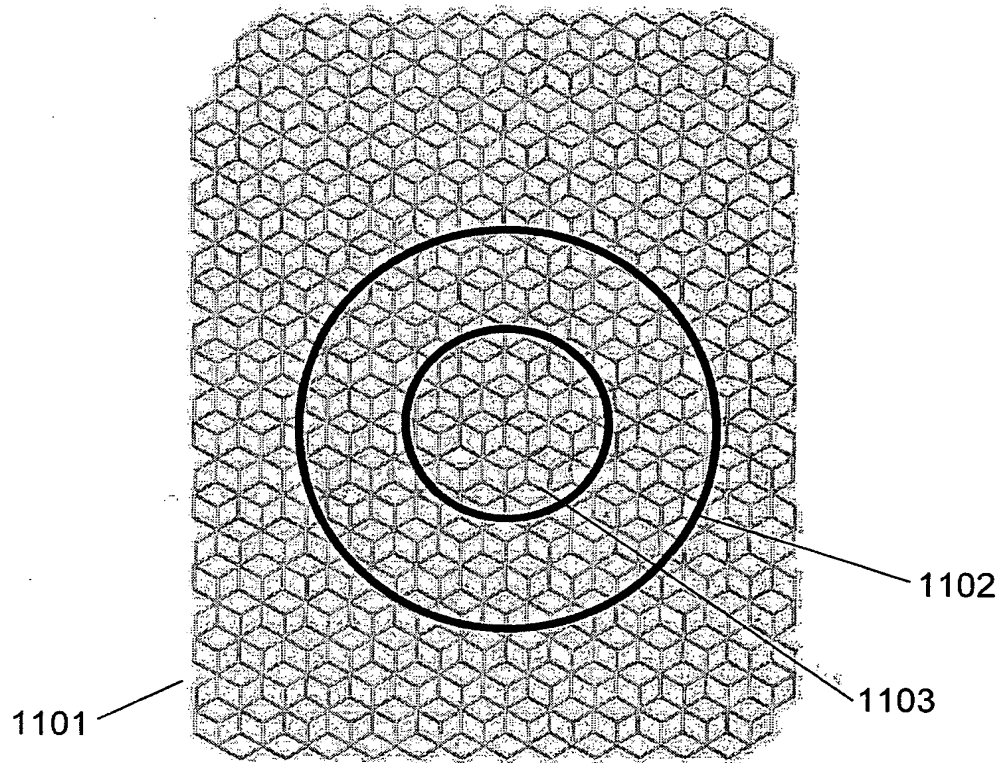


FIG. 11A

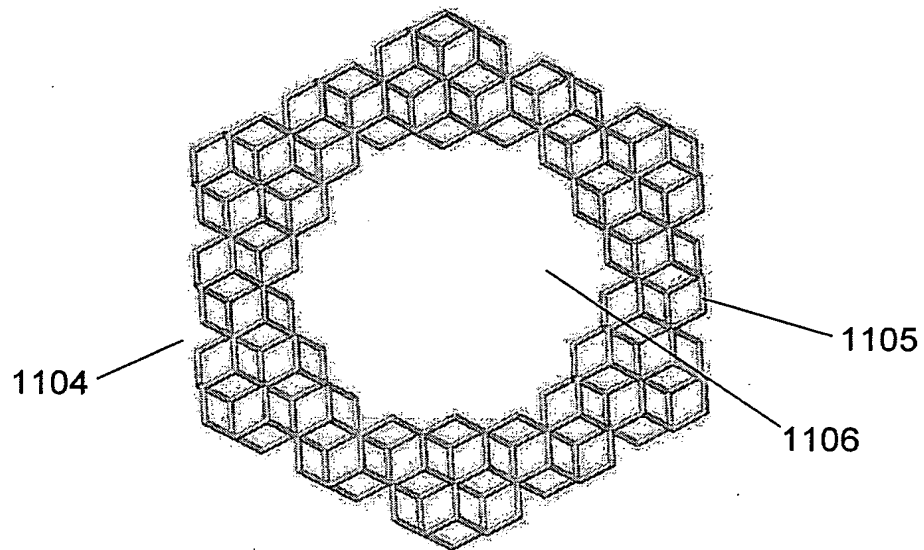


FIG. 11B

+

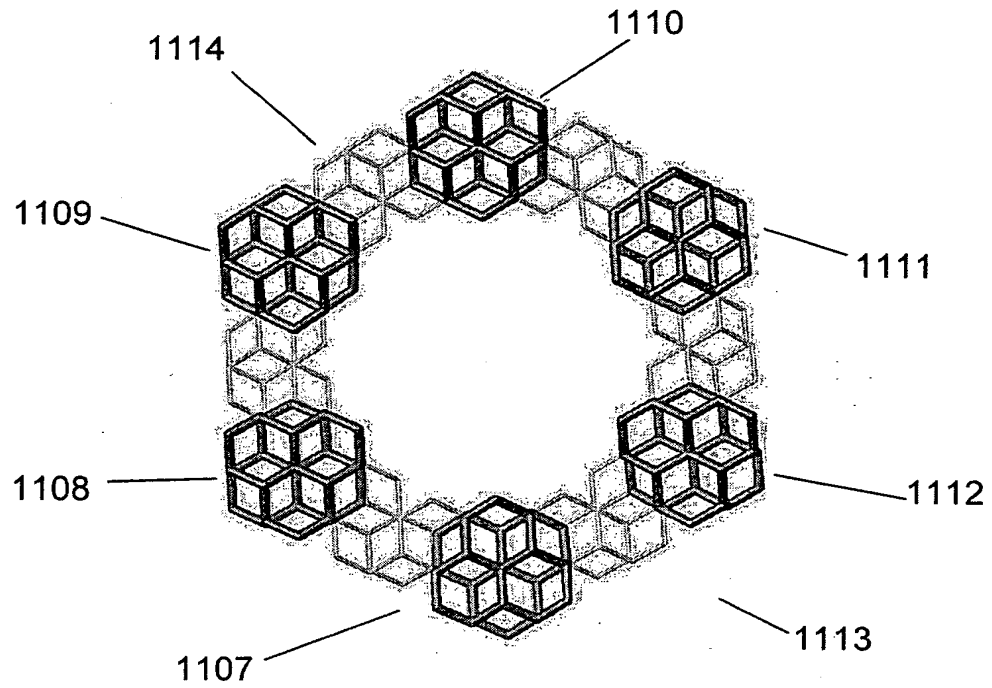


FIG. 11C

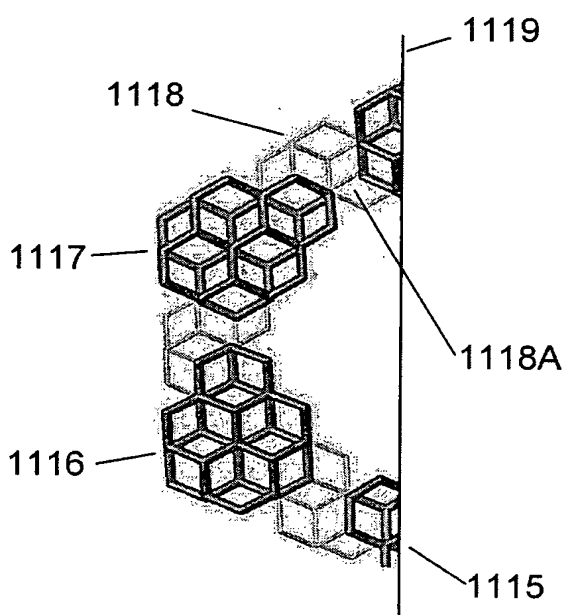


FIG. 11D

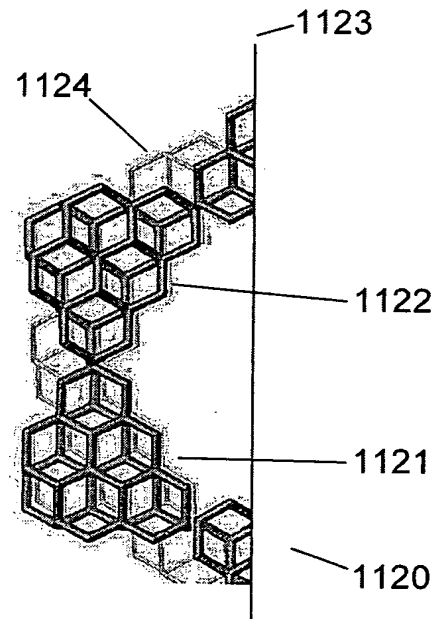


FIG. 11E

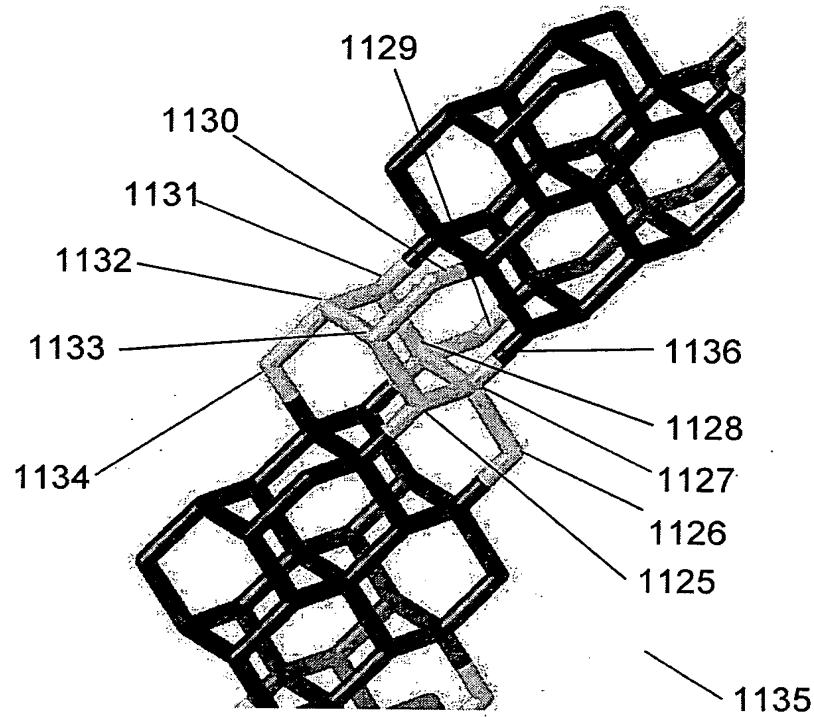


FIG. 11F

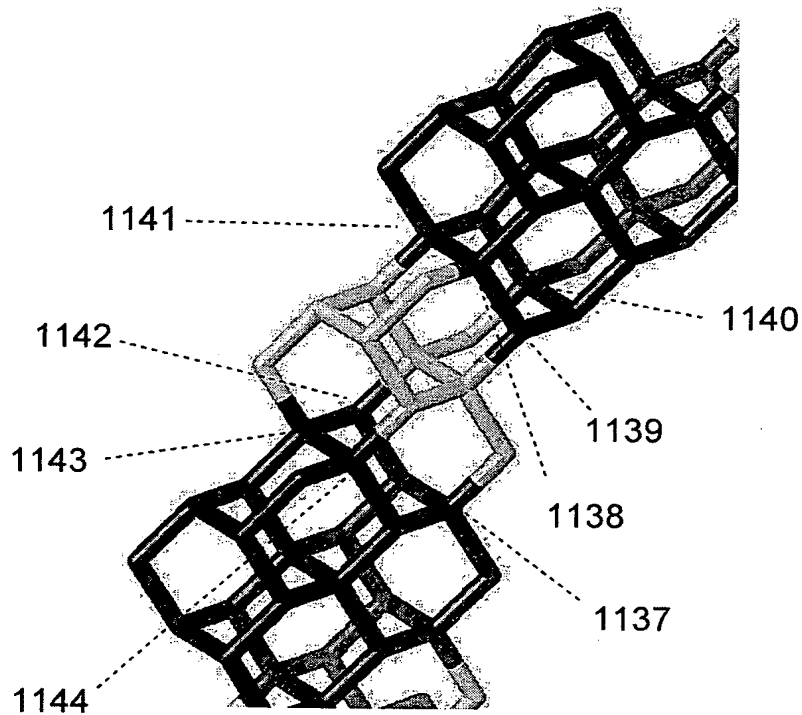
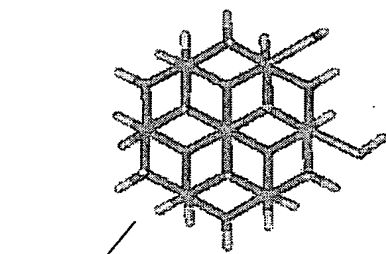
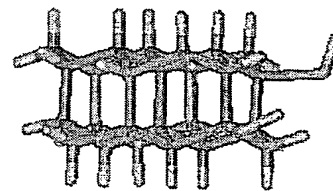


FIG. 11G

+

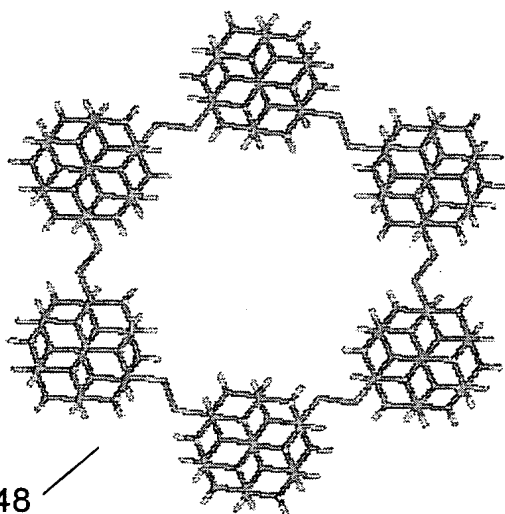


1146

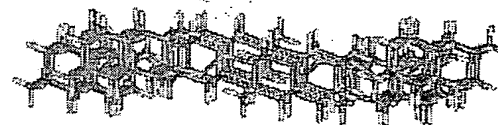


1145

FIG. 11H

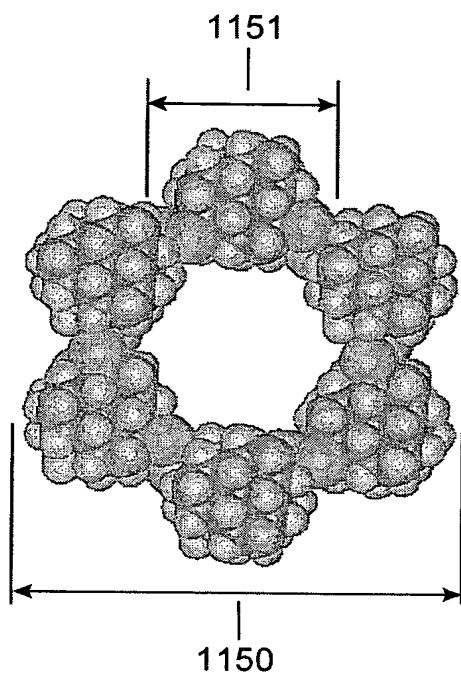


1148

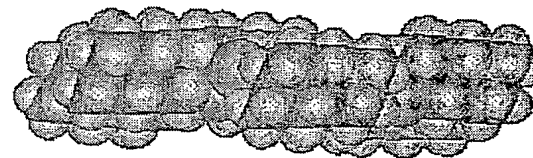


1147

FIG. 11I



1150



1149

FIG. 11J

+

+

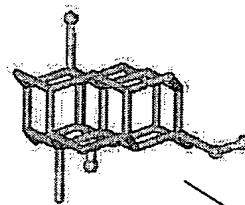
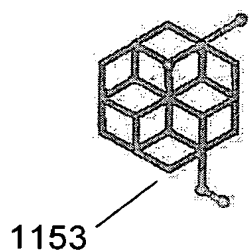


FIG. 11K

1.7 nm

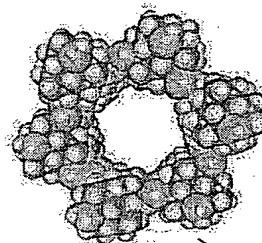
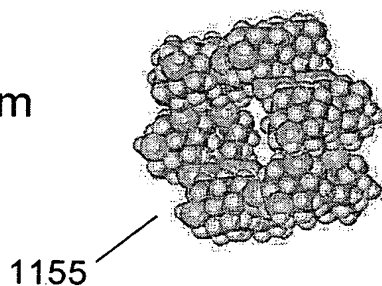


FIG. 11L

3.6 nm

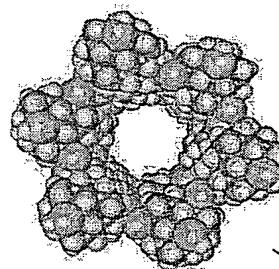
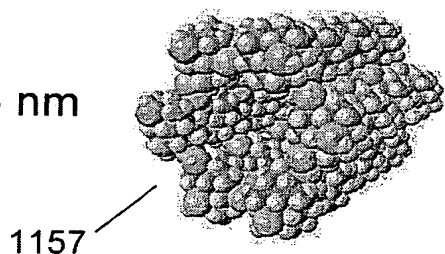


FIG. 11M

7.5 nm

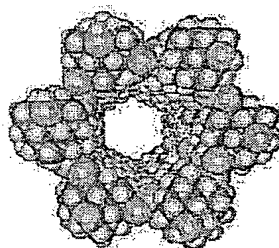
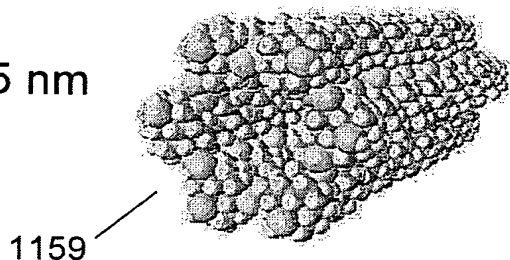


FIG. 11N

+

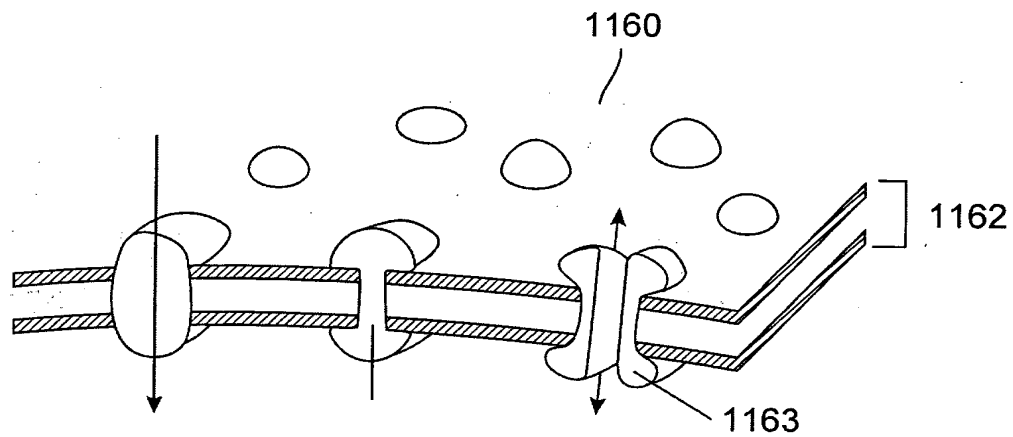


FIG. 110